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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/527,887	08/18/2005	Jeremy John Hawkes	41577/313584	5844
23370	7590	05/31/2007		
JOHN S. PRATT, ESQ KILPATRICK STOCKTON, LLP 1100 PEACHTREE STREET ATLANTA, GA 30309			EXAMINER SAINT SURIN, JACQUES M	
			ART UNIT 2856	PAPER NUMBER
			MAIL DATE 05/31/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/527,887

Applicant(s)

HAWKES ET AL.

Examiner

Jacques M. Saint-Surin

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 25 January 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 7-12, 19 and 20 is/are rejected.
- 7) ☒ Claim(s) 5, 6, 13-18 and 21 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Amendment***

1. This Office Action is responsive to the amendment of 01/25/07.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. The objection of claim 8 is moot.
4. Claims 1 and 19 stand rejected under 35 U.S.C. 102 (b) as being anticipated by Trampler et al. (US Patent 5,711,888) as indicated and discussed in the last office action.
5. Claims 2-4, 7-12 and 20 stand rejected under 35 U.S.C. 103 over Trampler et al. (US Patent 5,711,888) in view of (Hawkes et al.) as indicated in the last office action.
6. Claims 5-6, 13-18 and 21 stand objected as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims as indicated in the last office action.

### ***Response to Arguments***

7. Applicant's arguments filed 01/25/07 have been fully considered but they are not persuasive.
8. In response to Applicant's argument "Configuring thickness of the second wall as recited in these claims allows creation of a pressure node at the interface of the fluid and second wall, which is required for directing articles to the interface. See e.g., Application at p. 4, 1. 13 through p. 5, 1. 7", the Examiner, agrees with Applicant,

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however, it is noted that the features upon which applicant relies are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

In response to Applicant's argument, "the Trampler patent teaches that the thickness of the second wall should not be a multiple of  $1/2$  wavelength of the sound wave therein, See *id.*, col. 7, 11.54-58" and "Hence, the thickness of the second wall as claimed by Applicants is equivalent to the path length of the standing wave in the second wall, which is a multiple of about  $1/2$  the wavelength of the sound wave therein" and "By contrast, the thickness of the second wall of the device of the Trampler patent is an odd multiple of  $1/4$  the wavelength of the sound wave therein (i.e.  $1/4$ ,  $3/4$ ,  $5/4$ , as correctly calculated by the Examiner)", the Examiner agrees with Applicant. However, as indicated in the last office action, Trampler discloses also in col. 18, lines 12-20, the dimension  $x_{\text{sub.F}}$  of the wall F is, with respect to the excitation frequency  $f_{\text{sub.e}}$ , either small compared to a quarter of the wavelength or equal to half-wavelength or a multiple of the half-wavelength in that wall material, or the specific acoustic impedance of the wall material is approximately the same as the specific acoustic impedance of the dispersion. Trampler further discloses FIG. 6 is a preferred symmetric version of the resonator shown in FIG. 5. The main advantage of this design is the use of a square cross section tube, whereby the tube walls simultaneously perform as walls for the dispersion and as totally reflecting means for the composite resonator. Each of the thicknesses  $x_{\text{sub.B}}$ ,  $x_{\text{sub.B'}}$  of the two passive layers B, B', as well as the

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thickness x.sub.A of the active layer A, are chosen according to the invention.

9. In response to Applicant's arguments that "No suggestion of configuring the thickness of the second wall to be a multiple of about 1/2 the wavelength of the sound wave therein appears in the Hawkes 1 Article" and "Accordingly, even were (contrary to fact) the Trampler patent to contemplate modifying its apparatus to be consistent with that of the Hawkes 1 Article, the as-modified device would not be configured as recited in Applicants' claims" the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

### ***Conclusion***

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacques M. Saint-Surin whose telephone number is (571) 272-2206. The examiner can normally be reached on Mondays to Fridays between 10:30 A.M and 800 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams can be reached on (571) 272-2208. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Jacques M. Saint-Surin  
May 26, 2007



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